FIRST REPORT OF BRASSY CHUB, *KYPHOSUS VAIGIENSIS* (QUOY AND GAIMARD, 1825) FROM NORTHERN EAST COAST OF INDIA

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INTRODUCTION

Sea chubs belonging to the family Kyphosidae generally inhabit rocky zones and coral reefs of tropical and temperate marine waters worldwide (Sakai and Nakabo, 1995). There are six sub-families, sixteen genera and about 45 species belonging to the family Kyphosidae (Nelson, 2006). During local survey around Digha coast authors collected 3 examples of fishes identified as brassy chubs, *Kyphosus vaigiensis* (Quoy and Gaimard, 1825). This species belongs to sub-family Kyphosinae (Rudderfishes) and widely distributed in Indo-Pacific Region (Clements, 1997). Brassy chubs are as taken commercially important only occasionally in India (Talwar & Kacker, 1884). Various studies have been carried out to study the fish faunal diversity of eastern coast (West Bengal, Odisha & Andhra Pradesh) of India (Manna and Goswami, 1985; Goswami, 1992; Talwar et al., 1992; Barman et al., 2004; Chatterjee et al. 2000; Das et al., 2007; Mohapatra et al., 2007; Barman et al., 2007). There was no report on the occurrence of *Kyphosus vaigiensis* from the northern east Coast of India. There is no fish from the family Kyphosidae was reported from the West Bengal coast and only *Kyphosus cinerascens* (Forsskål, 1775) from the family Kyphosidae was reported from Odisha (Barman et al., 2007) and Andhra Pradesh coast (Barman et al., 2004).

MATERIALS AND METHOD

Three specimens (1ex, MARC/ZSI/F2471, Col.10.06.12 & 2ex, MARC/ZSI/F2477, Col. 12.06.12) of *Kyphosus vaigiensis* were collected (SL: 153-167 mm) from Digha Mohona (21°37.843'N, 87°32.827'E) by using trawl nets. Photographs were taken on the field and morphometric measurements were made from specimens preserved in 10% formalin. Morphometric characters were measured based on Hubbs and Lagler (1964). Measurements were taken with digital calipers to 0.1 mm. Abbreviations used for meristic character include: D, dorsal fin; P, pectoral fin; V, ventral fin, C, caudal fin; SL, standard length. The specimens are deposited in the laboratory of Marine Aquarium and Regional Centre, Zoological Survey of India, Digha.

RESULT AND DISCUSSION

*Kyphosus vaigiensis* (Quoy and Gaimard, 1825)

1825. *Pimelopterus vaigiensis* Quoy & Gaimard.; 386, pl. 62, fig. 4 (type locality Waigeo Island, Indonesia).


*Diagnosis*: D: XI, 14; A: III, 13; P: 19; V: I, 5. Body compressed and elliptical, dorsal and ventral profiles equally convex. Head small with small blunt snout, shorter than eyes; interorbital space convex. Two pairs of nostrils before eyes; anterior rounded and posterior elongated.
Opercle with two weak spines; maxilla reaching anterior margin of eyes. Mouth terminal with horizontal root of teeth in jaws; single outer row of incisor like teeth on both jaws and very narrow inner bands of small, canine like teeth on both jaws; bands of fine villiform teeth on vomer, palatines, pterigoids and tongue. Scales ctenoid and non deciduous, present on body, head, maxilla, soft rays part of dorsal and anal fins and proximal part of caudal fin; snout, premaxilla and lower jaw without scales. Dorsal fin with convex spinous portions and straight soft rays portions; dorsal origin above pelvic fin origin; 5th to 7th dorsal spines are strongest and long. Anal fin origin slightly posterior to mid body; 3rd anal spine longest. Pectoral fin bluntly pointed posteriorly; pelvic fin slightly shorter than pectoral fin and originating slightly little behind pectoral fin. Gill rakers in upper limb 9 and in lower limb 22-23; total gill rakers 31-32. Pored scales on lateral line 53; scales above lateral line 12; scales below lateral line 20; longitudinal scales series 59-60; cheek scales 16. Body bluish brown, darker dorsally and become pale ventrally. Flank with several yellowish brown longitudinal lines. Head with two yellow oblique stripes; one below eye and other behind eye. Dorsal and anal fins dark brown with black leading edge. Pectoral fin silvery near base and distally slightly darker; a black spot present near pectoral fin base. Details of morphometric data and meristic counts are given in Table 1.

Table 1: Morphometric data of *Kyphosus vaigiensis* (Quoy and Gaimard, 1825).

<table>
<thead>
<tr>
<th>Morphometry</th>
<th>% of Standard Length</th>
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<tbody>
<tr>
<td>Head length</td>
<td>28.74-29.41</td>
</tr>
<tr>
<td>Body depth</td>
<td>48.36-48.73</td>
</tr>
<tr>
<td>Eye diameter</td>
<td>7.05-7.21</td>
</tr>
<tr>
<td>Interorbital space</td>
<td>10.63-10.89</td>
</tr>
<tr>
<td>Pectoral fin length</td>
<td>19.28-20.25</td>
</tr>
<tr>
<td>Ventral fin length</td>
<td>18.95-20.05</td>
</tr>
<tr>
<td>Caudal peduncle length</td>
<td>17.64-20.95</td>
</tr>
<tr>
<td>Caudal peduncle depth</td>
<td>12.41-12.87</td>
</tr>
<tr>
<td>Pre dorsal length</td>
<td>41.83-45.56</td>
</tr>
<tr>
<td>Pre anal length</td>
<td>62.02-62.41</td>
</tr>
<tr>
<td>Snout length</td>
<td>8.4-8.9</td>
</tr>
<tr>
<td>Caudal fin length</td>
<td>28.48-29.41</td>
</tr>
</tbody>
</table>

*Distribution:* This species is broadly distributed in the Indo-Pacific region, include the Red Sea and South Africa waters, absent in eastern Pacific (Sakai and Nakabo, 1995); New Zealand (Clement, 1997); Samoa, Tahiti (Weber & Beaufort, 1936) east to the Hawaiian, Tuamoto, and Rapa islands (Froese & Pauly, 2012). In Indian coastal water this species was reported from Andaman and Nicobar Islands (Rao et al., 2000); Laccadive Islands (Jones & Kumaran, 1980; Tamil Nadu coast (Barman et al., 2011).

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REFERENCES


